DOCUMENT RESUME

ED 217 208 CE 032 794

AUTHOR Martin, Sharon T.; And Others
TITLE Apprenticeship - School Linkage Implementation Manual.
INSTITUTION CSR, Inc., Washington, D.C.
SPONS AGENCY Employment and Training Administration (DOL), Washington, D.C.
PUB DATE Oct 81
CONTRACT DOL-99-9-2224-33-57
NOTE 81p.; For related documents see CE 032 791-795.
AVAILABLE FROM CSR, Inc., Suite 500, 805 15th St., N.W., Washington, DC 20005 ($6.00).

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS *Apprenticeships; Career Education; Demonstration Programs; High Schools; *Program Administration; Program Development; *Program Implementation; *School Business Relationship; *School Involvement; Secondary Education; Vocational Education
IDENTIFIERS *Linkage

ABSTRACT

Developed to assist interested sponsors in implementing apprenticeship-school linkage projects, this guide is intended to organize the collective experiences of those who have implemented the demonstration projects to highlight the day-to-day mechanics involved. Section 1 overviews apprenticeship-school linkage. In section 2 factors are described that should be considered during the planning phase, including choosing a task force, allotting time for planning, school involvement, industrial involvement, goal setting, size/scope of project, targeting, legal concerns, and organization and structure. Section 3 focuses on activities, staff selection and training, project promotion, linking with schools, student recruitment, and job development. Project administration is the focus of section 4. It considers coordination of roles and responsibilities with registration agency staff; monitoring, accountability, and control; registration activities; staffing; single versus mutiple school district involvement; state variation in policy and law; and related instruction and transition. Section 5 highlights basic management principles. Section 6 describes contractor types and their strengths and weaknesses: state education agencies, postsecondary institutions, single school system, and private, non-profit corporations. Alternative administrative models are summarized. Appendixes include project summaries and a glossary. (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED217208

APPRENTICESHIP-SCHOOL LINKAGE IMPLEMENTATION MANUAL

Contract No. 99-9-2224-33-57
October, 1981

Prepared for:

Employment and Training Administration
U.S. Department of Labor
Washington, D.C.

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Edward P. Davin

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Prepared by:

Sharon T. Martin, Gerald D. Williams and Edward P. Davin

CSR, Incorporated
Suite 500
805 15th Street, N.W.
Washington, D.C. 20005

This report was prepared under contract with the Office of Youth Programs of the Employment and Training Administration, U.S. Department of Labor. Organizations undertaking such projects under government sponsorship are encouraged to state their findings and express their judgments freely. Therefore, points of view or opinions stated do not necessarily represent the official position of the Department of Labor.

CE032794

ACKNOWLEDGMENTS

This Implementation Guide represents the combined input of the project directors of the apprenticeship-school linkage demonstrations, the Bureau of Apprenticeship and Training (BAT) monitors and the CSR, Incorporated research team. The authors of this guide wish to thank these individuals for their generosity in sharing their time and knowledge in order to make this guide possible.

BAT Monitors

James E. MacGlaflin
Providence, Rhode Island

Mark S. Saiff
New Brunswick, New Jersey

I. Joseph DeMatteo
Nashville, Tennessee

John Gavin
Rockford, Illinois

James E. White
Cleveland, Ohio

Norwood Jatho, Jr.
New Orleans, Louisiana

Carl Heninger
Des Moines, Iowa

Project Directors

John Kossak
Providence, Rhode Island

Patricia Peacock
Trenton, New Jersey

Robert Grimm
Nashville, Tennessee

Paul Mann
Rockford, Illinois

Ignatius Mancuso
Cleveland, Ohio

Jackie Brainis
New Orleans, Louisiana

David Billings
Des Moines, Iowa

Other Employment and Training Administration Staff

Ray Palmer, Project Officer, Office of Youth Programs
Ella Chambliss, Bureau of Apprenticeship and Training
Vernice Grant, Office of Research and Development

CSR, Incorporated Staff

Edward P. Davin, Project Director
Gerald D. Williams
Sharon T. Martin
Gretchen Schultz
Guy Ross
John P. Walsh

TABLE OF CONTENTS

		Page No.
CHAPTER 1:	INTRODUCTION	1
1.1	What Is Apprenticeship-School Linkage?	1
1.2	How Does It Operate?	2
1.3	How Does It Differ From Other Work Experience Programs?	3
1.4	Research: What Do We Already Know About Apprenticeship-School Linkage?	5
CHAPTER 2:	PLANNING	8
2.1	Choosing a Task Force	8
2.2	How Much Time Does It Take To Plan?	10
2.3	School Involvement	11
2.4	Industry Involvement	12
2.5	Goal Setting	13
2.6	Determining the Size/Scope of the Project	14
2.7	Systems Targeting	16
2.8	Legal Concerns	18
2.9	Organization and Structure	18
CHAPTER 3:	GETTING STARTED	22
3.1	Selecting an Advisory Committee	22
3.2	Staffing, Selection, Training and Duties	25
3.3	Promoting the Apprenticeship-School Linkage Concept	28
3.4	Linkages With the Schools	30
3.5	Student Recruitment	34
3.6	Job Development	36
CHAPTER 4:	PROJECT ADMINISTRATION	38
4.1	Coordination of Roles and Responsibilities with Registration Agency Staff	38
4.2	Monitoring, Accountability and Control	40
4.3	Registration Activities	42
4.4	Staffing Issues	43
4.5	Single vs. Multiple School Districts	46
4.6	State Variation in Policy and Law	48
4.7	Related Instruction and Transition	48
CHAPTER 5:	KEEP IN MIND	51

CHAPTER 6: ADMINISTRATIVE MODELS 54

6.1 State Education Agencies 54
6.2 Post-Secondary Institutions 55
6.3 Single School System 56
6.4 Private, Non-Profit Corporations 57
6.5 Alternative Administrative Models 58

REFERENCES 60

APPENDIX A: PROJECT SUMMARIES 61
APPENDIX B: GLOSSARY 74

1. INTRODUCTION

1.1 WHAT IS APPRENTICESHIP-SCHOOL LINKAGE?

Apprenticeship-school linkage refers to the concept of in-school apprenticeship. It is an innovative approach to education and training which allows high school seniors to become registered apprentices while completing their secondary school education. Senior students are employed part-time as registered apprentices by local employers and are expected to continue as full-time apprentices once they complete high school. Thus, the apprenticeship-school linkage concept involves the in-school employment of youth in registered, apprenticeable trades and a direct transition from part-time to full-time apprenticeship employment.

The concept of apprenticeship-school linkage represents USDOL's attempt to bridge the gap between education and apprenticehsip. The concept addresses both the issues of school-to-work transition and high youth unemployment. While the concept of improving the school-to-work transition is not new, apprenticeship-school linkage is unique in that it combines the apprenticeship system of training with secondary school curricula, especially vocational education.

In 1977 the Department of Labor, Bureau of Apprenticeship and Training (BAT) funded demonstration projects in Cleveland, Ohio; Nashville, Tennessee; New Orleans, Louisiana; and Houston, Texas to test the concept of apprenticeship-school linkage. In 1978, the Office of Youth Programs (OYP) funded additional demonstrations in Rockford, Illinois; Des Moines, Iowa; Rhode

Island (statewide); and New Jersey (statewide). The demonstrations exhibited the following characteristics:[1,2]

- Limited number of locations;
- Common programmatic features;
- Varied administrative models; and
- Varied local environments.

Consequently, the demonstrations provided a rich source of information to test the apprenticeship-school linkage concept and to guide future replications. Each project has produced a wealth of information concerning the processes involved in integrating the diverse organizations and individuals participating in the apprenticeship-school linkage effort.[1,2]

The purpose of this Implementation Guide is to provide information which will assist those who wish to implement apprenticeship-school linkage projects. Rather than being a "how to" manual, the guide is intended to organize the collective experiences of those who have implemented the demonstration projects in order to highlight the day-to-day mechanics involved in such an effort.

1.2 HOW DOES IT OPERATE?

Apprenticeship-school linkage calls for a direct linkage between secondary schools and the formal, registered apprenticeship system of training. Operators of the projects develop linkages with area schools and local employers in order to recruit students and to develop and register apprentices and apprenticeship programs.

Project staff recruit senior students in high school for part-time employment as registered apprentices with local employers. These students are then expected to continue in these positions as full-time apprentices following high school graduation. Employers who cooperate with this effort do so by agreeing to develop and register apprenticeable job slots within their companies. Both students and employers must agree to the standards of apprenticeship in order for the students to be employed as registered apprentices.

The information and research results which are available[1,2,4] indicate that apprenticeship is a viable approach to bridging the gap between high school and the world of work. In addition, the apprenticeship-school linkage concept adds a new dimension to the continuity between education and the world of work for those young men and women interested in the skilled trades.

1.3 HOW DOES IT DIFFER FROM OTHER WORK EXPERIENCE PROGRAMS?

The concept of improving the school to work transition is not new. Efforts have been underway for many years and have given rise to a variety of programs and approaches which include: vocational education, cooperative education, the career education movement, and, in particular, the recent Youth Employment Demonstration Projects Act of 1977. The principal feature which distinguishes apprenticeship-school linkage from these other school-to-work efforts is the inclusion of in-school apprenticeship. High school seniors who are placed in apprenticeable positions with local employers become indentured and registered as apprentices while completing their high school

education. Apprenticeship-school linkage, therefore, provides students with an opportunity to participate in a nationally recognized system to training that meets pre-determined and accepted training standards.[3,5] Apprenticeship-school linkage offers the following advantages:

- Official recognition through the registered apprenticeship system that training meets accepted standards;
- Opportunity for students to earn income while learning a trade and completing their high school education;
- Job continuity for high school students following graduation from high school.
- Provision of a career ladder for youth after high school graduation with continued opportunities for skill development and wage advancement;
- Opportunity for schools to establish a link with employers' needs for skilled manpower;
- Real world learning experiences within the school structure at no cost to the school because apprentices are provided with on-the-job training;
- An opportunity for employers to hire young workers who have been screened for interest and ability in skilled trades and who have received some training in these trades; and
- An opportunity for employers to train entry level workers to meet their specific labor needs;

Finally, apprenticeship-school linkage is unique in that it uses the vehicle of apprenticeship to overcome a problem which lies outside of the normal concerns of apprenticeship and education individually, i.e., the linking of education, training and employment to facilitate the transition of youth from school to work. Thus, students begin participation as productive workers in the skilled trades while still enrolled in high school.

1.4 RESEARCH: WHAT DO WE ALREADY KNOW ABOUT APPRENTICESHIP-SCHOOL LINKAGE?

Research on the impacts of apprenticeship-school linkage on employers and apprentices[4] indicates that in-school apprenticeship is a viable approach toward aiding youth in their transition from high school to the world-of-work. Structured interviews were conducted with students and employers who participated in the demonstration projects, as well as with a comparision group of students who did not participate in the projects. These interviews revealed a number of positive impacts which are summarized below.

The research results indicated that, on the whole, student apprentices were more satisfied with their current or most recent employment than students who did not participate in apprenticeship-school linkage projects. Second, student apprentices tended to be more occupationally stable than comparison students. In other words, student apprentices tended to remain in those occupations for which they had been trained in high school. Also, employers noted that those program participants who remained in their apprenticeship positions tended to be better workers than those participants who left their apprenticeships. Therefore, research results suggest a positive relationship between apprenticeship retention and job performance.

Most student apprentices (over 90 percent) reported that they were very satisfied with the project and strongly endorsed the concept of in-school apprenticeship regardless of whether or not they remained in their apprenticeships. This suggests that even those apprentices who discontinued participation felt that they gained from the experience.

Employers' satisfaction with the apprenticeship-school linkage projects also was very high. Most of these employers (over 75 percent) were small businesses which did not have union representation of their workforce and which had no prior experience with apprenticeship. It is interesting to note that these types of employers were the ones who were most receptive to employing student apprentices and/or were most intensively recruited for the apprenticeship-school linkage projects. These employers were attracted by the projects' emphasis on the screening and training of entry level employees. Over 75 percent of the participating employers placed a high value on these services and, in addition, valued the projects' assistance with on-going training of apprentices.

As further evidence of employer satisfaction with the projects, over 90 percent reported that they were satisfied with the projects and over 50 percent indicated that they were very satisfied. In addition, nearly two-thirds of these employers recommended the projects to other employers and more than half rated the student apprentices as "better than" other young workers with whom they worked in the past.

Results of the research on the apprenticeship-school linkage demonstrations projects indicate that the number of years the projects had been in operation was the single most important factor in generating positive outcomes with employers. It would appear that projects which have been in operation over a long period of time have the opportunity to establish credibility with participating schools and employers. Specifically, research results suggest that the demonstration projects achieved operational maturity some time during their third year of operation.

In summary, the apprenticeship-school linkage projects have demonstrated the effectiveness of the apprenticeship-school linkage concept. Youth gain first hand information concerning the industry practices and skill requirements that prevail in the local labor market. Employers gain an increased awareness of the benefits of apprenticeship training and the abilities of youth. Overall, apprenticeship-school linkage projects provide a labor exchange serving employers seeking qualified entry level workers and youth seeking an entree into the skilled trades. In addition, the linkage concept improves school-employer relations by demonstrating the schools' interest in serving industry needs.

2. PLANNING

The successful implementation of the apprenticeship-school linkage concept requires careful planning. The need for the project must be assessed and the appropriate individuals/organizations should be contacted for their input in the planning process. This section describes those factors which should be considered during the planning phase. These include:

- Choosing a task force;
- Alloting time for planning;
- School involvement;
- Industrial involvement;
- Goal setting;
- Size/scope of the project;
- Targeting;
- Legal concerns; and
- Organization and structure.

The above listing is by no means exhaustive of all the issues to consider when planning. However, it does represent those areas which project operators feel require the most attention during the planning stages.

2.1 CHOOSING A TASK FORCE

A well-organized task force can be an asset in laying the groundwork for an apprenticeship-school linkage project. However, as is true of any committee effort, thought must be given to the purpose and the composition of the group.

The primary purpose of the task force is to assess the feasibility of the apprenticeship-school linkage concept within the local area. If the task force cannot arrive at some justification for implementing the concept in the local area, the project, more than likely, would not have been a success.

A good task force should be composed of individuals (i.e. community leaders, industry representatives, school system administrators and a registration agency representative) who would be directly affected by the apprenticeship-school linkage project. By building a committee around those individuals who would have a vested interest in the project, there will be a built-in acceptance of the concept. A representative task force will ensure that the concerns of relevant groups will be addressed. In addition, their input early in the planning stage helps to secure cooperation once the project has been implemented. If members cannot be recruited for the task force, this probably indicates that the in-school apprenticeship concept would not be viable in that particular area.

Unlike an advisory committee, the task force's function is crucial only during the planning stages and, therefore, should disband once the project has been implemented. The advisory committee on the other hand, should be used in the on-going project effort and should be considered as a component of the project. Therefore, the task force and advisory committee are distinct and separate entities which should not co-exist under normal circumstances. However, it is entirely possible that some individuals might serve as members of both the task force and the advisory committee.

2.2 HOW MUCH TIME DOES IT TAKE TO PLAN?

There are varying opinions concerning the length of time one should allocate for planning. However, most project operators agree that the optimum range should be between three and 12 months. The primary activities which take place during the planning phase include: conducting a feasibility study and enlisting the cooperation of the local school system and local employers. The feasibility study calls for time to:

- Research job availability projections;
- Assess the current, skilled manpower needs of the community;
- Investigate those trades in the project area which may be experiencing labor shortages; and
- Meet with representatives of the local Private Industry Council to discuss the employment situation in the local area.

Timing is of critical importance in any effort to integrate activities within a school year. More than likely the largest portion of planning time will be spent in securing the cooperation of the local school system(s). Because school systems supply the critically important element of skilled and motivated youth, and because school systems generally are complex and sensitive organizations, project operators should be prepared to invest a considerable amount of time to gain their support and cooperation. This means allowing sufficient time to go through all levels of the educational hierarchy to reach firm decisions regarding project implementation.

Other factors which influence planning time include: the size and scope of the project; single vs. multiple school district participation; and the targeting of specific participant groups. While allocating several months

for planning may seem to be a substantial amount of time, allowing adequate time for these activities cannot be overemphasized.

2.3 SCHOOL INVOLVEMENT

As indicated earlier, the importance of involving school personnel in the project planning phase is critical in the planning areas. Because they are one of the primary participants in the local projects, the input of school personnel during the planning process is a necessary prerequisite for successful project implementation.

The rules of protocol within a school system require that project operators seek input and approval at a relatively high level within the school system. However, the approval of high ranking administrators, or even elected school board members, does not ensure the cooperation of administrators at the individual school level. Therefore, it will also be necessary to seek out the input and cooperation of school principals since they control the project's access to students and staff. Securing their input and cooperation at an early stage facilitates the development of close working relationships between the project staff and school personnel. Communication between these groups avoids duplication of efforts within the schools and feelings of "turf invasion" on the part of the school staff.

In those instances in which there is a cooperative education program in the local school or school system, project operators should make every effort to develop a constructive working relationship between the project and the cooperative education program. While the two programs are different, they share enough similarities that there is considerable potential for mutually

beneficial cooperation between the two. On the other hand, there also is potential for stiff competition between them. Research on the demonstration projects documented extremes in this area ranging from nearly complete integration of cooperative education and apprenticeship-school linkage to a relatively high degree of alienation between them. At a minimum, the relationship between these two programs should be relatively harmonious with project staff providing cooperative education coordinators with information on non-apprenticeable positions that may be suitable for co-op students, and cooperative education coordinators encouraging eligible employers and students to participate in apprenticeship-school linkage. The character of the relationship between these two programs appears to be influenced by impersonal organizational and structural factors, as well as by personal attitudes regarding program interrelationships. Therefore, in the planning process, the projected relationship between the apprenticeship-school linkage project and the cooperative education program is one of the most important issues that must be resolved with the local school system.

2.4 INDUSTRY INVOLVEMENT

As is true with school systems, the involvement of local industry in the planning process also is of crucial importance to the project's success. Industry participation during the planning stages offers the following benefits:

- It serves as a means of gauging their support for the concept;
- It provides a forum for the discussion of employers' concerns;
- It is a means of determining the manpower needs of the community; and
- It demonstrates an interest on the part of project opertors in serving employers' needs.

It might be valuable to contact some of the following groups for their input during planning:

- Local Private Industry Councils;
- Labor unions;
- Trade associations;
- Local service clubs (i.e. Kiwanis, Lion's Club, et al.); and
- Local employers.

The time spent in enlisting the support of local industry may be viewed as a considerable investment which ensures the success of the project. The involvement of industry during the planning stage facilitates the establishment of a labor exchange between businesses seeking labor and young workers seeking employment.

2.5 GOAL SETTING

Goal setting establishes the direction for project operation and, if stated in measurable terms, provides evaluation criteria by which the success of the project can be assessed at a later date. Goal setting involves:

- Determination of outcomes to be derived from the project;
- Establishment of timetables; and
- Identification of interim progress benchmarks.

Project goals should be realistic and manageable, and designed to motivate, not frustrate, project staff. It is best to consider the following factors when setting goals:

- Project resources (funds);
- Staff size; and
- Project scope.

Measurable goals set the pace for project activities and serve as benchmarks of project progress. However, equally important to project success are the non-quantifiable indicators of project success. For example, enhancing relationships with schools and local employers is just as important, if not, more so, as meeting an apprenticeship registration "quota." Therefore, in striving to achieve the measurable goals, project operators should not lose sight of the "quality" goals.

2.6 DETERMINING THE SIZE/SCOPE OF THE PROJECT

The size/scope of an apprenticeship-school linkage project has a tremendous impact upon project operations. First, it affects staff travel time for job development. Second, it affects the ease with which apprentice-employer linkages can be achieved. Finally, the size or scope of an in-school apprenticeship project influences on-going project-school relations.

The size/scope of the project will be determined by its sponsorship arrangement. An apprenticeship-school linkage project which is sponsored by a state agency will most likely have a wider scope of operations than, say, a project which is sponsored by a single school district.

By the same token, the project's geographical location will also determine its scope and the ease with which basic project operations can be implemented. For example, staff working with a project located in and sponsored by

a single urban school district may find it easier to reach local employers, schools and students. More than likely, project participants will find it easier to get to worksites because of their accessibility via public transportation. Population density, proximity of area employers and availability of public transportation facilitate recruitment, job development, school linkages and employer-apprentice linkages. Projects located in rural areas generally require more staff travel time because schools and employers are more likely to be spread further apart. Therefore, decreased population density, lack of public transportation and greater distances between employers make achieving the necessary linkages more time consuming and rather complicated.

The influence of project size on staff travel time has already been noted. Additional considerations relate to project size/scope include staff size and availability of sufficient funds for adequate coverage of schools. A project must be staffed relative to its scope of operations. A project with a relatively wide service area must have a large enough staff so that they have the time to develop the quality of working relationships with schools and employers which are vital to the project's success.

Implementing apprenticeship-school linkage involves integrating diverse groups of organizations and individuals. Because of the complexity of this task, most project operators agree that it is best to implement the project on a small scale in the first year and to expand operations gradually in subsequent years. This "snowball effect" gives first-time project operators an opportunity to work all the "bugs" out of a program before implementing the project on a larger scale.

2.7 SYSTEMS TARGETING

Any decision to target project services toward special populations, e.g., minorities, females, or occupations, will have a tremendous impact on the operation of the project and the way in which it is viewed by the community. Targeting may be an option which is dependent upon the priorities/objectives of the project operator or a requirement of the funding source.

Outreach or special recruitment efforts geared toward special populations such as minorities can be viewed as a way of increasing minority access to the mainstream of American life. For those minority individuals who have been denied access to the means for improving their economic and social status, apprenticeship offers qualified minority students an option other than college. It provides them with an assurance of a job upon completion of high school, a career ladder beyond high school, and financial security in economically unstable times--opportunities which compare favorably with the opportunties available through higher edcation.

If the goal of project operators is to increase minority and/or female participation in apprenticeship, then they must consider those strategies that would be the most cost-effective for achieving this goal. Apprenticeship-school linkage project operators have found that the two most effective strategies are recruiting apprentices from schools or areas with substantial minority populations and using community-based or other minority organizations as referral sources for qualified minority candidates. These recruitment methods provide project operators with an opportunity to reach sizeable numbers of minority students while recruiting other students as well.

One note of caution regarding targeting minorities concerns the community's perception of the project. In many communities there is a tendency to view projects with an outreach focus as "give-away" programs rather than a viable means for employers to increase their number of minority employees. While this need not be true in every instance, it is a factor which must be considered.

In considering targeting of specific occupational areas, the experience of the demonstration projects suggests that apprenticeable occupations may be viewed conveniently within these three categories:

- Traditionally apprenticeable occupations within the construction industry;
- Traditionally apprenticeable occupations outside the construction industry; and
- Potentially apprenticeable occupations for which standards have not been registered previously.

With respect to the first category, demonstration projects were instructed by the Department of Labor to avoid occupations within the construction industry. With respect to the third category, those demonstration projects which attempted to initiate apprenticeship in non-traditional occupations became very frustrated with the delays and complexities inherent in this process. Consequently, most of the demonstration projects settled for the "middle ground" of traditionally apprenticeable occupations outside of the construction industry. Demonstration project staff generally received the best reception for student apprenticeships in this range of occupations from small, non-union employers who had not used apprenticeship previously.

2.8 LEGAL CONCERNS

The nature of apprenticeship-school linkage is such that there are a number of legal issues which are inherent in any effort to implement such a project. While there may be variations in the law depending upon the state in which the project is located, it is wise to be aware of the following:

- Liabilities;
- Child Labor Laws;
- Rights and Privacy Act;
- Laws concerning the use of apprentices under the age of 18;
- Insurance coverage of apprentices under the age of 18;
- The limitations of verbal agreements; and
- Contract administration.

Through investigation of the currently prevailing federal, state, and local laws, regulations, and practices is a fundamental component of good planning, as is examination of the relevant practices of private insurance carriers. In addition, good legal counseling during the early stages of the project helps to ensure a smooth operation and helps to avoid more serious problems which could arise at a later time.

2.9 ORGANIZATION AND STRUCTURE

The organization and structure of the apprenticeship-school linkage project is generally a function of the requirements of the project's sponsoring agency. However, presented here are some general practices which may help

smooth the flow of project operations in three key areas: staffing and personnel; project management; and relationships with the registration agency.

Staffing and Personnel

- Define staff duties and responsibilities. Project operators emphasize a team approach because it builds staff morale; however, they stress that each staff member should have a clear idea of his/her duties and how their particular function ties in with overall project operations;
- Develop and use a staff handbook to delineate staff roles and responsibilities and to protect staff members and the project should a dispute arise;
- The project manager/director should be involved in all phases of project operations especially during the start-up phase; and
- Maintain clear and open communications with staff.

Project Management

- Emphasize written rather than informal statements of policies and procedures for use in-house, with schools, employers and the registration agency;
- Develop a system of accountability by keeping accurate records to document project activities;
- Be aware of state and federal policies which could impact upon project operations;
- Standardize terms and definitions to ensure consistency of language among those involved in project operations;
- Seek out registration agency input to ensure uniformity in work processes;
- Provide information to both employers and apprentices concerning the related instruction requirement and concerning the organizations providing related instruction courses; and
- Develop a strategy for follow-up of apprentices between graduation and the beginning of related instruction.

Staff management is an area which is particularly critical to project operation. A staff is most effective when its members:

- Are unified;
- Have clear directives from project operators; and
- Have a clear definition of their duties and responsibilities.

A project manager accomplishes all of these when he/she maintains clear and open communication with project staff and emphasizes a team/cooperative approach toward project operation. These common sense methods make a significant contribution toward ensuring good staff morale and averting staff problems before they arise. The success of apprenticeship-school linkage stems from the abilities of individuals who are able to cooperate in integrating the complementary yet disparate set of community resources required for successful implementation of the apprenticeship-school linkage concept.

Relationships with the Registration Agency

Apprenticeship-school linkage adds a new ingredient to the concept of in-school employment for youth by having students begin apprenticeships while still enrolled in secondary school. Therefore, it is the relationship between education and apprenticeship (the registration agency) which distinguishes apprenticeship-school linkage from many other youth employment efforts.

Administering an apprenticeship-school linkage project calls for a considerable amount of interaction between registration agency officials and officials of the organization which is sponsoring the project. For this reason, it is imperative that the roles and responsibilities of project staff and registration agency staff be clearly delineated. The experience of the demonstration projects indicates that there are three key areas which especially require this clear delineation of roles and responsibilities:

- Registration of standards with new employers and registraton of student apprentices;
- Monitoring of student apprentices and employers while the apprentices still are in school; and
- Monitoring of employers and apprentices after the students have graduated.

A project which clearly delineates management roles, responsibilities and relationships between project staff and registration agency staff at the outset can handle more substantve issues once the project is implemented.

3. GETTING STARTED

Once the necessary groundwork for the project is in place and the appropriate individuals have been contacted, the next step is to determine those activities which will be necessary to get the project started. For lack of a better name, these are called "start-up activities." Start-up activities are equally as important as planning activities in that they also influence how effectively the project will be implemented. As indicated for planning, allowing sufficient time to complete all start-up activities is essential. Most project operators believe that a minimum of three months should be allowed for start-up activities and that, when possible, these activities should precede the beginning of the school year.

This section of the guide describes those activities which project operators noted as being essential to start-up. These include:

- Selecting an advisory committee;
- Staff selection and training;
- Promotion of the project;
- Linking with schools;
- Student recruitment; and
- Job development.

3.1 SELECTING AN ADVISORY COMMITTEE

Project opertors are in agreement concerning the importance of developing an advisory committee for the project. An effective advisory group can

be an asset to an apprenticeship-school linkage project and can do much to build the project's credibility within the community. Unlike a task force, the advisory committee is part of the on-going project effort and is best considered as a project component. When thinking about the project's advisory committee it is advisable to keep the following points in mind:

- Define the committee's function and the limits of its authority;
- Consider the composition of the committee;
- Decide who should chair the committee; and
- Keep the committee at a manageable size.

An advisory committee is most effective when its members have clearly defined responsibilities and an awareness of the limits of their authority. The committee's responsibilities will be dependent upon the capabilities of individual committee members, and the level of influence committee members have within the community. Most project operators believe that the committee should function only in an advisory capacity.

The responsibilities of the advisory committee normally include:

- Promoting the project within the community;
- Advising the project on strategies and approaches in enlisting participation by schools and employers; and
- Providing access to individuals and organizations which could be helpful to the project.

The precise membership of each project's advisory committee can vary considerably depending upon the geographic scope and administrative locus of the project, and depending upon other idiosyncratic features of the specific local environment in which the project is implemented. However, a truly representative and effective advisory committee should include a cross section of individuals from business, labor, educational and minority groups who

have a relatively high degree of influence within their respective organizations. A registration agency representative should be appointed to the advisory committee or serve as a non-voting resource person in committee discussions. An advisory committee also might seek the involvement of other groups with a youth focus (i.e. Catholic Charities, the Urban League, etc.).

In some cases, an advisory committee can be developed from a local or state advisory committee which has already been formed. For example, it is possible on the state level that the Bureau of Vocational Education within a State Department of Education may already have an advisory committee from which a subcommittee could be formed to advise the apprenticeship-school linkage project.

The size of the advisory committee is as important as the composition of the group. In general, the size of the committee is dependent upon the scope of the project area and the requirements for the composition of the group. There is consensus among project operators that the committee should be a manageable size, i.e., 7 to 11 members seems to be an acceptable membership range for the advisory committee.

Key points to remember concerning the advisory committee are as follows:

- An effective committee is an important project component;
- The committee should function only in an advisory capacity;
- The committee should include a cross-section of individuals representing labor, industry and education; and
- The committee should be a manageable size.

3.2 STAFFING, SELECTION, TRAINING AND DUTIES

Selecting a staff for an apprenticeship-school linkage project calls for consideration of certain factors. First among these is the size of the project. Size has a tremendous impact on the number of staff members needed to operate the project and, in general, a larger project needs a larger staff because a more extensive geographic area is involved.

The procedure used to select staff members is also an area that requires careful consideration. Most demonstration project operators agree that the best procedure is selection by a screening committee. While there is some debate concerning the appropriate role for the registration agency in this process, there is a consensus of opinion that the committee should be fairly small, and should include balanced representation of the relevant constituencies. There is a varied opinion among demonstration project operators concerning the appropriate role for the project's advisory committee in the staff selection process. This role would be dependent upon the functions assigned to the advisory committee and the extent of its authority.

The experience of the demonstration projects indicates that the project director should be the first staff member selected and then should participate in the selection of any other project staff members to be hired. Wherever possible, demonstration project operators suggest that staff selection procedures should guard against provision of "inherited staff" (e.g., a staff which was in place prior to the hiring of the project director).

The nature of apprenticeship-school linkage requires that the ideal project director have relevant trade experience and knowledge of apprenticeship, administrative experience and familiarity with the workings of school

systems. Keep in mind, however, that this is an ideal. It is unlikely that any one individual will have a combination of all of these experiences. However, the project director and other project staff positions will most likely call for individuals who can interact with school personnel, students, parents, and employers. Given this, the best strategy seems to be to choose among those candidates who have the sensitivity and skills necessary to deal with such diverse organizations and individuals.

It is helpful to build in certain safeguards both during and after staff selection. For example, developing a waiting list of staff positions avoids having to repeat the search process in the event that preferred candidates do not accept positions. Similarly, an evaluation at the end of a pre-determined probationary period can make an important contribution to project morale by providing all parties with an opportunity to determine whether or not the working arrangement is a positive one for all concerned.

Once the staff is on board, the project operator's first duty to both the new staff and the project is to provide training for the project staff. Project operators should allow roughly the first eight to ten weeks of employment for this process to be completed. Suggested training methods and materials include:

- Use of the Apprenticeship and Training Representative (ATR) Manual;
- Accompanying staff on their site visits;
- An introduction to the local registration agency staff;
- Use of the Dictionary of Occupational Titles, the Occupational Handbook, the Standard Industrial Codebook; and
- Information on recordkeeping and other relevant adminstrative duties.

Training also should be provided for clerical staff as well. It is important that they be familiar with apprentice registration forms and the paperwork details involved in completing them. While two months of training may seem to be a substantial block of time, it is time well invested to ensure the smooth operation of the project.

Project operators have emphasized the importance of clear directives regarding staff duties and responsibilities. While these need not be inflexible, project staff should have some guidelines on the extent of their responsibilities. In general the individual responsible for the management of demonstration operations was designated as Project Director. Staff members who were engaged in job development, student recruiting, job placement and school contacts were known as Project Coordinators.

On the whole, demonstration project staff functioned in three areas. First, they contacted schools and students to establish a system of referring qualified candidates to interested employers, and they maintained ongoing contact with participating schools. Second, they contacted employers to develop part-time apprenticeable positions for student apprentices and they maintained ongoing contact with participating employers. Finally, they coordinated registraton of standards and apprentices with registration agency staff, and maintained ongoing liaison with staff members of the registration agency.

There were two basic methods that the demonstration projects followed in assigning staff responsibilities. Under the first method, staff members were assigned to specific geographic areas and they made contacts with schools and employers in their assigned areas. The second method involved assignment of

staff members by occupational rather than geographic areas. Under this system, each staff member specialized in a specific occupational area and maintained contacts throughout the service area of the project. Regardless of how staff duties might be assigned in future projects, demonstration project operators suggest that no more than one project staff member be assigned to an employer or program that constitutes a single account with the relevant registration agency. This approach will enhance coordination between project staff and registration agency staff, and also will minimize confusion on the part of employers in their efforts to maintain relationships with both registration agency staff and project staff.

In summary, staffing an apprenticeship-school linkage project is an area which calls for careful consideration:

- Thought should be given to the size of the staff in relation to the size of the project area;
- A decision should be made as to how the staff will be selected and who will be involved in this process;
- Adequate time should be allotted for staff training; and,
- There should be clear directives concerning job duties and areas of responsibility.

3.3 PROMOTING THE APPRENTICESHIP-SCHOOL LINKAGE CONCEPT

The experience of the demonstration project operators has been that the apprenticeship-school linkage concept offers great benefits to all who participate in these projects. This includes students, employers, schools and state and federal registration agencies. Therefore, when promoting the apprenticeship-school linkage concept it will be important to identify those advantages which would be pertinent to each of the affected groups.

For students, participation in an apprenticeship-school linkage project:

- Allows students to earn income while completing their secondary school education;
- Eases the school-to-work transition by providing an assurance of full-time employment upon graduation;
- Tends to increase occupational stability;
- Offers high levels of job satisfaction;
- Offers an opportunity to achieve a measure of economic security in economically unstable times; and
- Broadens career avenues of students by providing them with a career ladder which provides for continued skill development and wage advancement.

Employers who participate in apprenticeship-school linkage project benefit by:

- Being assured of hiring an apprentice who has been screened and trained, thereby gaining a good entry level worker;
- Having an opportunity to tailor training to the employer's specific labor needs; and
- Gaining experience with the apprenticeship system.

Apprenticeship-school linkage offers schools the following advantages:

- Provides real world learning experiences in highly regarded occupations within the school structure at no additional cost to the school;
- Supplies an additional source of manpower to assist school personnel in facilitating the school-to-work transition;
- Improves school-employer relations by demonstrating the school's interest in serving employers' needs; and
- Renews local employers' specific interest in vocational education.

The registration agencies benefit by participating in generating an increase in the supply of skilled workers and by achieving increased visibility of apprenticeship as a system of training.

Strategies for promoting apprenticeship-school linkage projects vary. However, the key to a successful promotional campaign is an emphasis on personal contact with those organizations and individuals who should be aware of project activities. These might include groups of counselors, vocational instructors, cooperative education coordinators, parent-teacher associations, and, of course, various business groups. Common promotion practices employed by the apprenticeship-school linkage projects include:

- Presentations before community and business groups;
- Use of participating apprentices to promote the project; and
- Developing and distributing project literature among schools, students and other groups.

In summary, it is important to remember that a public relations campaign can only be as good as the project. Therefore, there is no better guarantee of good publicity than a successful record of performance. On the other hand, a good promotional campaign must be an honest one. It is better to give an honest picture of the project by presenting both its strengths and its limitations than to risk bad press at a later time by overstating or otherwise misrepresenting the benefits of project participation. A concept such as apprenticeship-school linkage has advantages which far outweigh any disadvantages it might have. Therefore, if properly implemented and publicized, apprenticeship-school linkage projects should have a natural tendency to promote themselves.

3.4 LINKAGES WITH THE SCHOOLS

Establishing a good working relationship with both school system and school personnel is of paramount importance when operating an apprenticeship-

school linkage project. The success or failure of the entire effort is contingent upon the linkages which the project is able to develop and maintain with the schools and upon the project's ability to meet the needs of the school system. This section describes the methods which project operators have used to develop these linkages and offers suggestions on factors to consider in order to maintain these relationships.

The following are thoughts to keep in mind when approaching a school system:

- Assess the needs of the system;
- Observe their rules of protocol;
- Be aware of the importance of timing and long-range planning when integrating activities into the school year;
- Be aware of the importance of following up on student apprentices when school is not in session (i.e. during the summer months);
- Establish both formal and informal relationships with school personnel;
- Consider the school's ability to provide apprentices; and
- Determine whether or not there is compatibility between the project and the school's policy regarding student employment.

Establishing a linkage with a school system is usually a lengthy and elaborate process which calls for appreciation and observation of their rules of protocol. Meaningful cooperation on the part of a school district will occur only after the needs of the school system have been carefully assessed and the cooperation has been approved at a relatively high administrative level. In some cases this administrative approval may be further delayed pending approval by a school board.

Project operators have noted two methods of seeking administrative approval. In the first method the initial contact is made at the school level

(i.e. with a principal or cooperative education coordinator) and the information is passed up through the appropriate administrative channels within the school system. With the second method, information is first shared with a relatively high ranking school official who then passes this information down to those individuals on the school level who would be directly involved with the project. Both methods are equally effective as long as the appropriate individuals are informed and the information on the project flows through the proper channels.

Both formal and informal relationships are necessary for smooth project operation. The formal relationships represent the official stance of the school system regarding project participation; while the informal relationships with guidance counselors, cooperative-education coordinators and other sectors of the school staff are more important for day-to-day activities.

Another consideration in establishing linkages concerns the importance of timing and long-range planning. The school calendar year is generally a crowded one with many activities scheduled well in advance. Therefore in any effort to integrate non-school activities into the school year, consideration must be given to the school system's need for sufficient notice of up-coming activities and planning time.

Of paramount importance in establishing linkages with schools is their ability to provide the project with apprentices. For example, it may be unwise to devote extensive amounts of time to working with a school whose emphasis is on college preparation. It is unlikely that such efforts would yield a significant number of apprentices. On the other hand, time spent in linking with, say, a vocational high school is time well invested as there

is a high probability of achieving a substantial number of apprentice registrations.

A final consideration is the compatibility between the project and the school's policy regarding student employment. When the objectives and operations of the individual school's programs and their policy on work release time for students can correspond to the goals of the apprenticeship-school linkage project, there is considerable potential for successful project implementation.

Once a linkage has been established between the project and schools it is advisable to devote some time to maintaining these relationships. The following are suggestions for "linkage maintenance:"

- Maintain clear and open lines of communication with school staff;
- Share information on students' progress with parents, teachers and other appropriate individuals;
- Meet periodically with school personnel and relevant association groups; and
- Establish a primary contact within the school who will keep project staff informed of school happenings.

In summary, there does not seem to be a common organizational scheme for establishing linkages with schools. However, the two most important points to remember are:

- Be aware of the school system's rules of protocol; and
- Be sensitive to their concerns regarding timing and long-range planning.

3.5 STUDENT RECRUITMENT

There is varying opinion among demonstration project operators concerning whether employers or apprentices should be recruited first. It appears that there are two basic approaches which project operators informally refer to as the "rifle approach" and the "shotgun approach." The first method involves recruiting a qualified student apprentice first, and then generating a specific job slot for that candidate. With the second method, job slots are generated first and apprentices are then matched to interview for and fill the positions generated. Arguments can be made in support of either approach; however, the choice of either method is a decision for project operators to make in light of the information presented here. Regardless of the approach that is selected, remember that individual contacts with students and employers are most effective, particularly when their respective employment and training needs are met. Both student recruitment and job development are activities which occur simultaneously during project operation; however, for the purpose of organizing this guide, job development activities will be discussed in a separate section.

Recruiting students involves piquing the interest of young men and women in the idea of apprenticeship. While the advantages of apprenticeship have been listed elsewhere in this guide, some of the highlights are that it:

- Provides students with an opportunity to earn an income while completing their secondary school education;
- Provides students with an opportunity for career advancement; and
- Provides students with the opportunity to achieve a measure of economic security in economically unstable times.

As is true with employers the most effective methods of recruiting students are those which involve personal contacts. Recruitment methods include the following:

- Making formal presentations in classes followed by a one-on-one interview session with interested students;
- Using counselors or teachers as a referral source for qualified apprentices;
- Using an apprentice to address prospective apprentices ("peer counseling");
- Participating in "career days";
- Use of community-based organizations as referral sources; and
- Addressing students as early as tenth grade to "plant the seed" of apprenticeship.

One of these methods warrants additional consideration and that is the use of teachers and counselors as a referral source for qualified apprentices. First, teachers and counselors who work with students on a day-to-day basis are better able to evaluate students' maturity and ability to handle an apprenticeship. Therefore, these professionals are in a position which enables them to provide invaluable assistance in pre-screening prospective apprentices. Second, working closely with school staff demonstrates the project's respect for their judgment. This goes a long way toward establishing good working relationships with the schools.

Project operators strongly advocate meeting with students as early as tenth grade. First, informing tenth graders of apprenticeship might give a potential drop-out some incentive to complete his/her high school education. Second, for students interested in continuing their education beyond high school, apprenticeship serves as an alternative to college. Finally, providing students with early information on opportunities for part-time employment

during the senior year enables interested students to plan their curricula so that all course requirements can be met, at the same time that a block of time during the senior school day can be reserved for part-time apprenticeship employment on a released time or cooperative education basis.

One final note concerns caution in the selection of student apprentices. Project operators should be careful to select those students who demonstrate a relatively long-term interest in and commitment to the apprenticeship experience. Those who merely wish to have a part-time job during high school and have other long-term interests will not serve the interests of the employers, the projects, or the schools who collaborate in the implementation of the apprenticeship-school linkage concept.

3.6 JOB DEVELOPMENT

Job development is an activity which is as important to project success as student recruitment. Job development primarily involves eliciting a willingness, on the part of employers, to accept student apprentices on a part-time basis and to cooperate with formal procedures required to initiate and maintain an apprenticeship program. Accomplishing this task involves making the employer aware of the incentives for participating. These are as follows:

- Provision of a free referral service; and
- An opportunity to build their own skilled labor pool by becoming personally responsible for the training of young entrants to the labor market.

The following is a list of those recruitment methods which have proved to be effective for project operators:

- Contacting employers who have had apprenticeship programs registered with BAT or SAC but who have registered no apprentices;
- Contact with local business organizations;
- Working with community college placement offices;
- Referrals from vocational instructors, counselors and satisfied employers;
- "Cold" calls;
- Working with the local employment service office; and
- Contacts with small employers who have not had previous experience with apprenticeship and whose employees are not represented by a union.

As is true for student recruitment, gaining the cooperation of employers is facilitated by personal contacts on the part of project staff. It provides employers with an opportunity to express their concerns regarding apprenticeship and to receive an immediate response to their questions. This then demonstrates the project staff's interest in serving the needs of employers and brings the project a step closer to achieving employer-project linkages.

4. PROJECT ADMINISTRATION

The success and continued operation of any project is dependent upon the way in which it is administered. Policies and procedures must be carefully laid out so that answers to questions will be on hand before the need arises. Listed below are those areas which demonstration project operators feel are particularly relevant to the administration of apprenticeship-school linkage projects:

- Coordination of roles and responsibilities with registration agency staff;
- Monitoring, accountability and control;
- Registration activities;
- Staffing issues;
- Single vs. multiple school district involvement;
- State variation in policy and law; and
- Related instruction and transition.

4.1 COORDINATION OF ROLES AND RESPONSIBILITIES WITH REGISTRATION AGENCY STAFF

It is important to give consideration to registration agency responsibilities and roles in project administration early on in the implementation process. This will be especially critical for those projects which are located in states in where BAT and SAC co-exist. When this is the case the responsibilities of these two agencies in relation to the project will vary. Therefore, this situation requires clear delineation of responsibilities and

coordination between the two agencies to avoid ambiguity on the part of project operators regarding the flow of paperwork, reporting procedures and the proper channels of decision-making authority. Due to variations among projects and their local contexts, the delineation of registration agency responsibility must occur on a project-by-project basis.

Project operators have offered the following suggested roles for registration agency staff in project operations:

- Promote the apprenticeship-school linkage concept;
- Establish guidelines for project operation;
- Manage the flow of paperwork for apprentice and apprenticeship program registrations;
- Monitor project activities;
- Make apprenticeability determinations;
- Provide assistance in staff training, particularly in the use of registration forms where this is appropriate;
- Ensure high standards of quality in the registration of new programs;
- Standardize terms and definitions to ensure consistency of language;
- Follow up on graduating apprentices to ensure continuity of training; and
- Standardize work processes used in registering apprenticeship programs.

Communication between project staff and registration agency staff during the initial stages of implementation will result in consistency in the exercise of decision-making authority and increased responsiveness to problems as they arise.

4.2 MONITORING, ACCOUNTABILITY AND CONTROL

Although apprenticeship-school linkage represents the combined efforts of education and apprenticeship, monitoring, accountability and control of apprenticeship-school linkage projects are issues which are fundamental to their implementation. The nature of apprenticeship-school linkage is such that both educational and apprenticeship organizations tend to believe they "own" the projects. Educational organizations argue that they "own" the projects because school staff work closely with project staff to screen and select apprentices. Registration agencies also claim ownership because it is their involvement in the effort that distinguishes apprenticeship-school linkage projects from other work experience programs. In fact, apprenticeship-school linkage is an equal partnership between educational and apprenticeship organizations. In order for the concept to work, neither agency can have control. Each group participates equally in an effort to aid the school-to-work transition for youth.

In the absence of federal funding, questions concerning monitoring, accountability and control of apprenticeship-school linkage projects may assume even more importance. Consequently, the importance of maintaining written policy and procedures cannot be overemphasized. These policies and procedures should include guidelines for roles and responsibilities of the project staff and funding agency(ies). As the BAT plays less of a role in funding and monitoring apprenticeship-school linkage projects, their primary role will shift toward upholding the standards of apprenticeship in partnership with other registration agencies (SAC's).

In addition to being accountable to the funding agency(ies), school systems and registration agencies, apprenticeship-school linkage projects also must be accountable to employers and apprentices. In their relationships with employers, project operators have a responsibility to select and screen apprentices carefully before recommending them for apprenticeship positions. For apprentices, project operators must provide a quality apprenticeship experience which will ensure their economic security.

No summary could be more appropriate to this section treating accountability than a simple reiteration of varied organizations and inviduals to which apprenticeship-school linkage projects are accountable. They include the:

- Funding agency(ies);
- Local school system(s);
- Registration agency(ies);
- Participating employers; and
- Participating student apprentices

Only two clear conclusions emerge from consideration of all these aspects of accountability. First, the specific approach to integrating these diverse constituencies will be completely unique to each local situation and no clear-cut rules of procedure could ever be set forth in a manual such as this. Second, successful implementation of an apprenticeship-school linkage effort in any location will require very high order skills on the part of project staff in communicating, coordinating and collaborating with the diverse interest groups who will be involved with the project. Therefore, in the absence of specific procedures, this general principle may be kept in mind.

4.3 REGISTRATION ACTIVITIES

A primary goal of apprenticeship-school linkage projects is the expansion of apprenticeship as a system of training. Bearing this thought in mind, it is understandable that those activities associated with the registration of apprentices and apprenticeship programs will be critical areas of project operation.

The registration process consists of two basic steps:

- Registration with BAT or SAC of the program standards which include the work processes, job description and arrangements for related instruction; and
- Completion of the apprentice agreement between the employer and the student apprentice.

These processes vary in complexity according to the procedures which are established by the project and the registration agency. In any case, the registration process requires accuracy, close coordination with the registration agency and attention to detail.

The complexity of the registration process (i.e. the number of steps involved) is influenced by the variation in roles assumed by the project staff and the registration agency, and whether or not the project is located in a BAT or SAC state. Therefore, one of the first steps involved in establishing project registration processes is to determine the roles which the project staff and the registration agency staff will play in these activities.

In those instances in which project staff completed the registration paperwork, some problems were initially encountered by the demonstration projects until staff became more familiar with the paperwork details of apprentice and apprenticeship program registration. These problems were resolved by close supervision and training by registration agency staff.

All registration paperwork must flow to the registration agency office for approval. The number of steps involved in this process is determined by whether the state in which the project is located has a SAC. If the project is located in a SAC state, registration applications are formally approved or disapproved by the SAC. This means that the registration paperwork flows through both the state BAT office for review and the SAC office for approval. For those projects in states where there is no SAC, the paperwork management and actions on applications are implemented directly through the BAT system. In those instances in which the BAT handled registration activities directly, fewer problems were encountered than situations in which the registration agency was a SAC.

In addition to the flow of paperwork involved in the registration process, the following factors also warrant consideration:

- Standardize terms/definitions. Inconsistency in language usage among project staff and registration agency staff can cause registration errors;
- Seek registration agency input to insure uniformity in work processes; and
- Work processes which are customized to employer specifications should, to the fullest extent possible, incorporate methods which are common to comparable training programs.

Communication between the project and registration agency, and coordination in the management of paperwork details will help to ensure that a rather complicated undetaking flows as smoothly as possible.

4.4 STAFFING ISSUES

Staffing issues in the apprenticeship-school linkage projects fall into the following areas: selection, training and evaluation. Because project

operation is a function of staff quality, the way in which each of these three areas is handled will make the difference between a project which is operating in an efficient manner and a project whose progress is hampered by staff misunderstandings.

Staff selection has been discussed in a previous section. However, to summarize the key areas, project operators are in agreement that the selection process should be conducted by a screening committee. They also believe that once the project director has been hired, this individual should participate in this process. This is because most project directors tend to work more effectively with a staff they have helped to recruit vs. one which is already "in place" and imposed upon them.

Ideally, candidates for staff positions should have a background which combines previous work experience, education, administrative skills and a knowledge of training and apprenticeship. Obviously, no individual is going to have extensive experience in each of these areas. These areas, therefore, have been identified to serve as a guide to help project operators select those candidates who demonstrate an ability to interact with individuals from labor, management and education.

Once the project staff has been hired, the project operator's next responsibility is to ensure that the staff is properly trained. Demonstration project operators believe that it is best to set aside the first eight to ten weeks of project operation for staff training. At first glance this may appear to be a considerable amount of time. However, it is best to look upon it as an investment in the effective operation of the project. Attempting to "save time" by eliminating this process inevitably results in the loss of

valuable time while staff members learn how to perform their jobs through the process of trial and error.

While staff bring to the project certain strengths and skills their training should cover the following areas:

- Student recruitment;
- Job development;
- Interviewing/counseling techniques;
- Registration processes (where appropriate); and
- Record keeping

During this process it would be wise to consider the special training needs of the project director. He/she may need training in the following areas:

- Staff management/supervision;
- Budget management; and
- Contract administration.

Some of the methods and materials project operators have used in staff training include:

- Use of the ATR manual;
- Accompanying staff on site visits;
- Meetings with BAT/SAC staff;
- Use of the Dictionary of Occupational Titles, Occupational Handbook, and Standard Industrial Codebook.

These methods should be part of a planned program of training. The use of a detailed training outline could be particularly helpful and would ensure that all relevant aspects of project operation are included in the training process.

Project operators also recommend building in a probationary period of three to six months for project staff, followed by a performance evaluation

at the end of this time. The probationary period and evaluation serve the following purposes: (1) It provides project staff with an adequate amount of time to learn and become comfortable with their duties; (2) It is a safeguard against maintaining ineffective staff; (3) It allows for an information exchange between project staff and project operators on methods of improving project performance.

4.5 SINGLE VS. MULTIPLE SCHOOL DISTRICTS

The involvement of a single school district rather than multiple school districts in an apprenticeship-school linkage project has a major impact on the ease with which the project can be implemented. The purpose of this section will be to highlight those features which are unique to each type of operation.

A single school district project offers the advantage of smoother (i.e. less "bureaucratic") program operation. Because they are less complex than the larger, multiple school district projects, the single school district project tends to be less subject to outside interference. These projects also enjoy the cooperation of more schools within their district because project staff have more time to develop good working relationships with the staff of the schools within the district.

A major problem with this approach is that the project may be so closely identified with a particular school district that the project tends to operate within a somewhat closed system. This could impede project operators in their efforts to serve students in neighboring school districts. A second

problem concerns the population of potential student apprentices from which the project may draw. A single school district will have a finite number of vocational or cooperative education students in the system. This, then, limits the number of apprentices that project operators might be able to recruit.

Projects in which multiple school districts participate are not affected by any of the aforementioned disadvantages. These projects can recruit from a larger population and are able to serve more students. However, projects which are cooperating with multiple school districts must strike a balance between involvement with each school system and neutrality among all of them--a very tricky undertaking.

Participation by multiple school districts in apprenticeship-school linkage poses two potential problems. First, policies regarding student work release time tend to vary from one school district to the next. Therefore, project operators must be prepared to be somewhat flexible in their dealings across school districts while upholding the standards of apprenticeship. Second, multiple school district projects are more likely to pose a logistical problem in that staff will be required to travel extensively to cover a fairly large territory. Unless the project is adequately staffed, this could inhibit the development and maintenance of project-school relations.

An effective strategy for the first year of project implementation may be to start the project on a small scale. This would allow project operators time to work out any start-up and staffing problems. Assuming that all goes well in the first year, project operators might then expand project operations to a larger scale.

4.6 STATE VARIATION IN POLICY AND LAW

It is important to be aware of policies and laws governing youth and employment as they vary from state to state. The following are of particular importance for apprenticeship-school linkage project operators:

- Child labor laws;
- Insurance coverage of youth under the age of 18 who are involved in hazardous occupations; and
- Policy on part-time apprenticeship

The local BAT or SAC office may be helpful in providing this information.

4.7 RELATED INSTRUCTION AND TRANSITION

Related instruction is a basic component of apprenticeship training. It calls for a specific number of hours of classroom instruction in those subjects which are related to the area in which the apprentice is being trained. For apprenticeship-school linkage project operators the related instruction component can be a somewhat problematic area. Difficulties with this component fall into three areas:

- Ensuring the continuity of the apprenticeship process;
- Determining which individual or agency is responsible for follow-up on apprentices once they have graduated; and
- Availability of instructional resources necessary to fulfill the related instruction requirement.

The months between the time an apprentice completes his/her high school education and begins related instruction can cause a significant break in the apprentice's training. It is relatively easy, during this time, for an

apprentice to "fall between the cracks" unless measures are taken at the outset of training to ensure the continuity of the training process beyond secondary school. Therefore, the first step in maintaining the continuinty of the apprentice's training is to inform both the employer and the apprentice of the related instruction requirement. It would also be helpful if project operators provided the apprentices with specific information on when and where courses were being offered. This measure would eliminate any confusion, on the part of employers and apprentices, about the related instruction requirement and what would be considered acceptable by the registration agency.

Opinion varies among project operators as to who could best handle follow-up on the apprentice during his/her transition from high school through related instruction. There are some project operators who feel that this should be the responsibility of the registration agency while others believe that it is a project responsibility. Selection of either option most likely will depend upon the arrangements which are worked out between the project and the local BAT/SAC office. Either option will be effective as long as the individual or agency responsible for follow-up maintains close, personal contact with the apprentices and their employers.

Demonstration project operators had a variety of methods for handling the related instruction component with some taking a more, or less, active role than others. For example, some project operators felt it was sufficient to mention that related instruction was a program component while others worked with local junior colleges to develop related instruction curricula. Area colleges and employers as well, varied in their cooperation with the

related instruction effort. For example, one local college provided financial aid for apprentices taking related instruction courses at that college; some apprenticeship sponsors paid for apprentices' courses while others arranged for work release time so that apprentices could attend classes. In other instances vocational classes that apprentices took during high school were credited toward the related instruction requirement.

For apprenticeship-school linkage, the related instruction period is a "test period" for all those who are involved in the apprenticeship process. First, the student apprentice is no longer under the watchful eyes of instructors and counselors, but is required to attend after-hours instruction, so his/her commitment to the apprenticeship is tested. Second, at this time, the student apprentice technically is no longer a part of the project. Therefore, the project staff's commitment, "above and beyond the call of duty," to his/her successful completion of apprenticeship is tested. Third, many newly registered employers' understanding of and adherence to their responsibilities as sponsors of apprenticeship programs meet their first real test in making arrangements for related instruction classes for their new employees. Finally, even the involvement of registration agency staff is tested at this point. If registration agency staff have the same regard for programs and apprentices registered by apprenticeship-school linkage projects as they have for their own pre-existing programs and apprentices, they will enforce the related instruction requirement just as vigorously for the "new" programs as they do for their "old" programs. The attrition of apprentices during this transitional period can be decreased with clear delineation of roles and responsibilities by project and BAT staff, an organized strategy for handling this process, and by personal follow-up on each apprentice.

5. KEEP IN MIND. . . .

It was indicated earlier that this guide represents the collective experiences of all those involved in the apprenticeship-school linkage demonstration effort: BAT monitors, project directors, and the CSR, Incorporated researchers. This guide also serves as the vehicle through which the demonstration project operators can share their experiences with others who wish to implement similar projects. The following are "words of wisdom" which project operators felt others should be aware of when attempting to establish a linkage between education and apprenticeship organizations. While this listing is by no means conclusive, it highlights basic management principles which may help to facilitate the smooth flow of project operations under any type of project sponsorship.

- Plan before implementing.
- Negotiate contracts carefully at start-up.
- Develop a public relations and marketing strategy which emphasizes the simplicity of the apprenticeship-school linkage concept.
- Recognize power structures within the community and work within the system.
- Be visible within the community.
- Develop a system of accountability:

  -- Keep accurate records to document project activities; and

  -- Establish policies and procedures early in project operations.
- Be aware of the progress of apprentices.
- Keep communications clear and open with schools, employers and the registration agency.
- Work to develop new programs and update old ones. Innovation is a key to the success of the apprenticeship-school linkage concept.

- Follow the staff management policies listed below:

  -- Plan staff time carefully;

  -- Emphasize a team concept;

  -- Maintain open lines of communication.

- Use the experiences of others as resources in project development.

- Remember that the long term needs of individuals supersede the every day routines of project administration.

As a further aid to those who wish to set up apprenticeship-school linkage projects, the following is presented as an implementation checklist.

Planning

- Select task force.
- Assess the general receptivity of the local community to the project.
- Assess project climate.
- Secure the cooperation of employers and schools (or school systems).
- Determine the scope of project operations.
- Inform appropriate individuals and organizations about the project.
- Seek out legal advice.

Start-up

- Select advisory committee.
- Develop strategies to promote the concept.
- Select staff according to pre-determined selection procedures and begin training.
- Begin recruitment and job development activities.
- Establish school linkages.

Maintenance

- Develop a system of accountability.
- Set policies and procedures and follow them.

- Maintain open communications with registration agency, schools and staff.

- Outline staff responsibilities and organize staff time.

- Follow progress of apprentices.

Evaluation

- Look at original project goals. If project performance fell short of goals determine the reason by asking the following:

  -- Was the goal realistic?

  -- Was the project managed properly?

  -- Were project relations with schools, employers, and registration agency(ies) handled properly?

  -- Was the project promoted sufficiently?

  -- Did staff make the most efficient use of their time?

- If the project met or surpassed its goals, examine whether or not the goals were sufficiently challenging. If they were, then determine what were the most successful strategies and how they might be further improved.

It is important to note that while these basic principles are essential to any undertaking, the success of apprenticeship-school linkage stems from the ability of individuals representing diverse organizations to come together in order to resolve mutual concerns regarding the education, employment and training of youth.

6. ADMINISTRATIVE MODELS

Contractors for the eight demonstration projects fell into four separate categories. These were as follows:

- Projects sponsored by state education agencies which served multiple school districts;
- Projects sponsored by post-secondary institutions which served multiple school districts;
- Projects sponsored by and serving a single local school system; and
- Projects sponsored by private, non-profit corporations serving multiple school districts.

Each sponsorship arrangement offers relative advantages and disadvantages for project implementation. In this section each contractor type along with its strengths and weaknesses regarding achievement of apprenticeship-school linkage will be described. This section will conclude with a brief summary of the most advantageous sponsorship arrangement and also will suggest other contractor types which have not been previously described.

6.1 STATE EDUCATION AGENCIES

Both the New Jersey and Rhode Island demonstration projects were sponsored by their respective State Departments of Education. In the instance of Rhode Island, however, management of the project was subcontracted to a private, non-profit corporation, the Industry-Education-Labor (IEL) Council of Rhode Island.

Sponsorhip by a state education agency offers the advantage of direct organizational linkages with the schools in the state, but because of their

autonomy, this does not ensure the individual school district's or school's cooperation in the project. The State Department of Education's participation in the project does imply its approval of the project effort which, therefore, gives the project a "stamp of approval" in the eyes of local school administrators. Such approval may encourage local administrators to adopt a stance in favor of the project. However, this approach is only viable when the state is perceived by school administrators as being strong in the area of vocational education. In addition, this particular arrangement forecloses other sponsorship arrangements within the state.

Experience to date indicates that the state education administrative model is a promising approach to project sponsorship. The approval of the state education department makes establishing linkages with the schools easier and helps the project to be perceived as a part of the educational structure.

6.2 POST-SECONDARY INSTITUTIONS

The New Orleans and Houston apprenticeship-school linkage projects were sponsored by vocationally oriented community colleges. The Houston project was implemented by a college which operated as a part of the Houston Independent School District. The college which sponsored the New Orleans project, Delgado College, had no formal ties with any of the area's school systems, but had a history of training in the skilled trades. These two projects also shared features in common with the Nashville project which was sponsored by a private non-profit corporation. All three were sponsored by non-state educational agencies while serving multiple local school districts.

This contractual arrangement appears to represent a risky approach to project sponsorship. Any attempt by a non-state educational agency to serve multiple school districts calls for previous involvement with each of the participating school districts while at the same time maintaining neutrality among all of them. It appears that this approach to sponsorship involves an element of risk: one project outdistanced all the others in performance; one was cancelled after its first year of operation; and the third was a lack-luster performer. To date there is not enough evidence to warrant support or discontinuation of this arrangement. Thus, careful consideration should be given to both the strengths and weaknesses of local post-secondary institutions to implement linkages and maintain collaborative arrangements among the diverse constituences involved in apprenticeship.

6.3 SINGLE SCHOOL SYSTEM

The Cleveland and Des Moines apprenticeship-school linkage projects are both examples of projects which were sponsored by a single local school district and which served only those schools within the district. Both projects, for the most part, limited their areas of operation to their respective city boundaries although Cleveland expanded its service area to include some of the surrounding counties during the latter months of the demonstration phase.

This relatively conservative approach to project sponsorship offers the assurance of cooperation from the schools within the sponsoring district. One disadvantage of this particular model is that it generally excludes other

local education agencies from project participation. The projects sponsored under this type of arrangement tend to be consistent performers--not dramatically high but not disappointingly low.

6.4 PRIVATE, NON-PROFIT CORPORATIONS

The demonstration projects which operated under this sponsorship arrangement included Nashville and Rockford which were sponsored respectively by the Greater Nashville Community Committee, Inc. (GNCCI) and the Rockford Area Vocational Corporation (RAVC Corp). Both the GNCCI and the RAVC were formed for the express purpose of managing the respective demonstration projects. Unlike the GNCCI which had no organizational linkages with schools in the Nashville area, the Rockford sponsor established a primary linkage with the Rockford Area Vocational Center, an area vocational center which is owned and operated by the Rockford School District #205 and which also serves a few students from the five counties which surround the city. During its first two years of operation, the project drew its student apprentices exclusively from this center and, therefore, had a strong de facto indirect link with the Rockford School District since almost all the students at the vocational center come from this district.

The information which is currently available indicates that the private, non-profit corporation provides a weak sponsorship arrangement, particularly in the absence of demonstration funding. Local independent organizations which sponsor apprenticeship-school linkage projects have no natural ties with educational organizations. Therefore, these projects have less assurance of cooperation from the schools. Research evidence does indicate that

the private, non-profit sponsors did have the strongest links with employers. However, the independence and the stronger ties with employers provided by this type of sponsor are purchased between schools and organizations oriented to apprenticeship--a basic objective of the demonstration projects. This suggests that sponsorship by a private, non-profit corporation involves inherent disadvantages which cannot readily be counterbalanced by the advantages of this sponsorship arrangement.

6.5 ALTERNATIVE ADMINISTRATIVE MODELS

Each of the demonstration projects has operated with the benefit of federal funding. However, with the discontinuation of federal funding, current and prospective project operators must explore alternative funding/sponsorship arrangements.

A number of apprenticeship-school linkage projects have already been developed and are currently operating without federal funds. According to the most recent information available, these sponsors include:

- State departments of education;
- State departments of labor;
- Local school districts; and education agencies; and
- Local CETA prime sponsors.

Experience to date indicates that in the absence of federal funding, sponsorship at the state level offers considerable promise. In fact, dual sponsorship by a state department of labor and a state department of education also is possible and would seem to offer a very effective arrangement. This

approach could enhance cooperation between apprenticeship and education agencies. It could provide project operators with free access to both organizations and, at the same time, it could help to reduce the problem of attempts on the part of a single agency to control the project. Sponsorship by local school districts also appears to offer considerable promise.

The information presented here is not intended to advocate use of one approach over another. For example, combinations of the administrative models also are possible, e.g., state sponsorship of programs in key local school districts or cooperative arrangements between local school districts and area community colleges. The number of sponsorship arrangements is limited only by the project operators' resourcefulness and creativity. The models presented here merely serve as guidelines or avenues which prospective project operators might wish to explore as they plan their projects.

REFERENCES

1. "Interim Report: Study of New Youth Initiatives in Apprenticeship. Volume I: Summary and Issues." Washington, D.C.: CSR, Incorporated, July 1980.

2. "Interim Report: Study of New Youth Initiatives in Apprenticeship. Volume II: Site Visit Reports." Washington, D.C.: CSR, Incorporated, July 1980.

3. "The National Apprenticeship Program." Washington, D.C.: U.S. Department of Labor, Bureau of Apprenticeship and Training, 1980.

4. "Report on Impacts: Study of New Youth Initiatives in Apprenticeship." Washington, D.C.: CSR, Incorporated, August 1981.

5. "Setting Up an Apprenticeship Program." Washington, D.C.: U.S. Department of Labor, Bureau of Apprenticeship and Training, 1980.

APPENDIX A

PROJECT SUMMARIES

CLEVELAND APPRENTICESHIP-SCHOOL LINKAGE PROJECT
CLEVELAND, OHIO

The Cleveland demonstration project illustrated the single school district administrative model. It began operating in September 1977 under the sponsorship of the Cleveland City Public School District and was staffed by a project manager, three project coordinators and one secretary. As of June 1981, the project registered 593 apprentices and 289 apprenticeship programs. About 320 employers participated with the Cleveland project.

The Cleveland project operated out of the William D. Howell Facilities and emphasized placement in non-union trades. Consequently, most apprentices were placed in machine, automotive and printing trades, among others. The recent development of Child Care and Nursing Assistant apprenticeships entailed instruction at local colleges and universities with the awarding of an earned Associate Degree upon completion of the apprenticeship term.

Apprentices were recruited by project coordinators who were assigned to specific areas. About 35 percent of the student apprentice placements were with minority students. Coordinators worked closely with Trade and Industrial (T&I) instructors to select those students who were best qualified to participate in the project. This close working relationship between the project staff and T&I instructors came about as a result of state policy on reimbursement for vocational education programs and the school system's strong support of the apprenticeship school-linkage concept.

In addition to their recruitment responsibilities, coordinators also made initial contacts with employers and assessed their apprenticeship program potential. The final registration of apprentices and apprenticeship programs took place at the Ohio State Apprenticeship Council (SAC) following the local Bureau of Apprenticeship and Training's (BAT) contact with interested employers. Strategies used to promote the project included personal contacts with local unions; publication and distribution of brochures which explained the project; presentations to community organizations; and production of a taped interview with the project manager which was played over a local radio station.

During the 1979-1980 school year the Cleveland demonstration project expanded its base of operation into Cuyahoga, Lake, Lorain and Medina Counties. Sixteen school districts were actively involved in the program. While the long term impacts of this expansion were not determined, it did appear that support for the apprenticeship-school linkage concept was growing in the Cleveland area. The State Department of Vocational Education supported four additional in-school apprenticeship projects throughout Ohio, which provided further evidence of the state's endorsement of the concept.

Project Manager:
Mr. Ignatius A. Mancuso
c/o William D. Howell Facilities
4016 Woodbine Avenue
Cleveland, OH 44113
(216) 631-5345

BAT Monitor:
Mr. James E. White
USDL/BAT--Room 720
Plaza 9 Building
55 Erieview Plaza
Cleveland, OH 44114
(216) 522-3823

HOUSTON APPRENTICESHIP-SCHOOL LINKAGE PROJECT
HOUSTON, TEXAS

The Houston Apprenticeship-School Linkage Project was one of the two demonstrations which was sponsored by a post-secondary institution which served multiple school districts. The project operated during the 1977-78 school year and was sponsored by Houston Community College. Independent school districts located in Houston, Pasadena and Galena Park participated in this effort and were regarded as separate administrative units.

The project was staffed by 11 individuals, including a project director; an assistant project director/senior counseling specialist; 5 counselors; and 4 secretaries. Project counselors and three secretaries were assigned to each of the three school districts while the remaining staff members were assigned to the project's central office at Houston Community College.

The autonomy of the three school districts in relation to Houston Community College was a unique feature of the project. Each school district selected the staff members for the positions assigned to that district and had supervisory authority over these individuals. The central office at Houston Community College functioned in a coordinative rather than an advisory capacity.

During its year of operation the Houston project registered 111 apprentices, 54 percent of whom were members of minority groups, and 39 apprenticeship programs. Thirty-seven percent of the apprentices were employed in construction trades such as electrician, carpenter, plumber, painter and building maintenance mechanic. On the whole, employers fell into three groups: the Maintenance Division of the Houston Independent School District, the Houston Joint Apprenticeship and Training Committee (JATC) for the Electrical Contracting Industry, and other small businesses with each group employing 36 percent, 17 percent and 47 percent, respectively.

The project's involvement with the Maintenance Division of the Houston School District and the Houston Electrical JATC was a significant feature of the project. First, the Maintenance Division employed 50 percent of the apprentices from the Houston School District. Second, the project's relationship with the JATC was unique because of the Department of Labor's prohibition against linkages with the construction trades and because of the JATC's enthusiasm for the apprenticeship-school linkage concept.

During its year of operation the project distinguished itself in several ways. First, the project met a significant proportion of its apprentice registration goal. Second, the project enrolled a high percentage of minority apprentices. Finally, the Houston project was the only project of its kind which succeeded in establishing a linkage with a construction industry JATC.

NASHVILLE APPRENTICESHIP-SCHOOL LINKAGE PROJECT
NASHVILLE, TENNESSEE

The Nashville demonstration project began operating in September 1977 under the sponsorship of the Greater Nashville Community Committee, Inc. (GNCCI). The GNCCI was established solely to sponsor the project, and thereby made this demonstration one of the two projects which was administered by a private, non-profit corporation. Its staff consisted of a project director, four coordinators and one secretary.

The Nashville demonstration served Davidson, Sumner and Robertson Counties, each county presenting the project with diverse educational settings and administrative contexts within which it had to operate. The Metro School System in Davidson County, for example, required project operators to work within the existing cooperative education programs in the secondary schools. Included among the three participating schools in Sumner County was an area vocational center which referred students from its three feeder high schools. Robertson County's four high schools fed students into an area vocational center. The center, in turn, allowed students to participate in the project on a released time basis and thereby gave them an opportunity to receive training via the vehicle of apprenticeship.

The project's developmental approach emphasized the individual initiative of each staff member. For example, coordinators exercised a good deal of autonomy in contacting individual employers; and, as with employers, contacts with schools and students were made on an individual basis. Assisting employers with the arrangements for related instruction was left to the discretion of the individual coordinators. Consequently, obtaining the cooperation of relevant organizations and individuals was a function of the personal relationships established by the coordinators.

Using this strategy the project, as of June 1981, had registered 270 apprentices and 156 apprenticeship programs. Most of the apprentices were employed in metal-working, mill cabinet, mechanical and other trades, as the project emphasized job development in apprenticeable occupations outside the construction trades.

Since beginning operation in 1977, the Nashville project benefitted a number of organizations and individuals. Schools were able to offer a high quality work experience situation to their students. Employers had a referral source for promising candidates based on the assessment of vocational instructors. Students benefitted by receiving a substantial wage and meaningful work experience while completing their education. The National Apprenticeship Program benefitted by the addition of new programs and apprentices.

Project Director:
Mr. Robert A. Grimm
Greater Nashville Community
Committee, Inc.
500 Interstate Blvd. South
P.O. Box 111130
Nashville, TN 37211

BAT Monitor:
Mr. I. Joseph De Matteo
USDL/BAT--Suite 406
1720 West End Avenue
Nashville, TN 37203
(615) 251-5405

NEW ORLEANS APPRENTICESHIP-SCHOOL LINKAGE PROJECT
NEW ORLEANS, LOUISIANA

The New Orleans Apprenticeship-School Linkage Project began operating in September 1977 and served 68 schools within a 5-parish (county) area which encompassed Jefferson, St. Bernard, St. Tammany, Orleans and Plaquemines Parishes. The project was sponsored by Delgado College, which was a community-technical state college located in Orleans Parish. The project was one of two demonstrations which was sponsored by a local post-secondary institution which served multiple school systems. Its staff consisted of a project director, four project coordinators and secretarial and clerical support staff.

Total apprentice and apprenticeship program registrations as of June 1981 were 922 student apprentices and 374 apprenticeship programs. While no efforts were made to target special groups, the project was successful in registering approximately 29 percent female and 32 percent minority apprentices since 1977.

Organized labor was supportive of the project but on the whole maintained an inactive role with regard to the project's operations. Most placements were, by design, with non-union firms and in non-construction trades. Indentures typically were in traditionally apprenticeable occupations, with the largest number of registrations occurring in automobile, service, machine and maintenance occupations.

Project coordinators, under the supervision of the project director, handled the paperwork necessary for apprentice and program registration. Apprenticeship agreements were forwarded to the local office of the Bureau of Apprenticeship and Training (BAT). The BAT then forwarded the applications to the Louisiana State Apprenticeship Committee (SAC) for apprentice and program registration.

Coordinators were assigned to specific parishes for job development/ recruitment purposes. They stressed personal contacts with employers and school personnel as the most effective developmental strategy although they used mass mailing of project brochures to local employers as a job development technique. Coordinators also used brochures to recruit students. However, use of the brochure was more selective as they were distributed to students through cooperative education coordinators and school counselors.

Project staff and cooperative education staff also worked closely together by exchanging information on apprenticeable and non-apprenticeable job slots. For example, project staff informed school personnel of employers who had non-apprenticeable positions available and school personnel inform project staff of newly developed slots which might have been apprenticeable. Their mutual sharing of information benefitted both groups by increasing the number of potential job placements for both project participants and cooperative education students.

Since its inception in 1977, the New Orleans project did much to demonstrate the viability and success of the apprenticeship-school linkage concept.

The project exceeded the number of apprenticeship registrations established as a goal in its original contract. There were more apprenticeable job slots available than project staff could fill with student apprentices. Employers expressed satisfaction with both student apprentices and project operations. Good working relationships were established between the project staff and local school system personnel. This evidence suggested that the in-school apprenticeship concept was highly successful in the New Orleans area.

Project Director:
Ms. Jackie Brainis
School-to-Work Linkage Project
Delgado College, City Park Campus
615 City Park Avenue
Building No. 33
New Orleans, LA 70119

BAT Monitor:
Mr. Norwood Jatho, Jr.
USDL/BAT--Room 618
F. Edward Herbert Bldg.
600 South Street
New Orleans, LA 70130
(504) 589-6103

DES MOINES APPRENTICESHIP-SCHOOL LINKAGE PROJECT
DES MOINES, IOWA

The Des Moines demonstration was an example of a project which was sponsored by and which served a single local school system. This project, initiated in September of 1978, was sponsored by the Des Moines Independent Community School District and served the six public senior high schools in the City of Des Moines. One of the six, Des Moines Technical High School, was mandated specifically to administer Trade and Industrial cooperative education. A preliminary agreement stipulated that the project's initial 50 placements would be identified through Des Moines Tech. However, in reality, 75 percent of the placements to date involved students from other schools in the Des Moines school district.

The Des Moines project operated with a single staff position, that of project coordinator. The coordinator was responsible for all program activities, including public relations, student recruitment, and job development. Students were recruited through dissemination of brochures to high school counselors and Industrial Education instructors; presentations to Industrial Education classes; and referrals by instructors and counselors. Employers were recruited based on the interests of student apprentices. The coordinator identified employers in the appropriate industry, often through use of the telephone directory, and made a personal visit to determine whether the employer was interested in employing a student apprentice. Other developmental strategies included contacts with the Des Moines Chamber of Commerce and the Iowa Association of Manufacturers, and, in addition, the use of a professional slide/tape presentation. As of June 1981, the project registered 74 apprentices and 84 apprenticeship programs in traditional areas such as auto mechanic, carpenter/maintenance, web-press operator, cabinet maker, compositer/printer and others.

Part of the impetus for the development of the Des Moines Project came from the experience and interest of the Bureau of Apprenticeship and Training (BAT) monitor, and, to date, the project's relationship with BAT has been a good one. BAT provided the project with technical assistance in facilitating registration, in facilitating meetings with employers or unions and in promoting the apprenticeship concept within the school district. A three- to four-week turnaround time was typical in the BAT registration process.

The Des Moines project appeared to be very sound in terms of school district, student and employer support. The project recently reached an agreement with the Machinists' Union which called for the union to waive certain starting wage rate provisions for student apprentices. This agreement facilitated placement of apprentices in union shops and, in turn, encouraged the apprenticeship concept.

Project Director:
Mr. David L. Billings
1800 Grand Avenue
Des Moines School District
Des Moines, IA 50307
(515) 284-7888

Project Monitor:
Mr. Carl K. Heninger
USDL/BAT
637 Federal Bldg.
210 Walnut Street
Des Moines, IA 50309
(515) 284-4690

NEW JERSEY APPRENTICESHIP-SCHOOL LINKAGE PROJECT
NEW JERSEY, STATEWIDE

The New Jersey demonstration project was an example of a project which was administered by a State education department and which served multiple local school systems statewide. The project, which was initiated in September 1978, was sponsored by the New Jersey Department of Education, Division of Vocational Education and Career Preparation. The scope of the project was limited to those secondary schools with cooperative education programs. However, schools meeting this criterion were available in every county in the state.

The New Jersey project staff consisted of a project coordinator and a secretary. Apprenticeship information and career development were provided by the State Bureau of Occupational Programs and project staff through the co-op and apprentice coordinators. Student recruitment, orientation and selection were also a responsibility of co-op coordinators and the apprentice coordinators. In participating vo-tech schools, vocational counselors also participated in recruitment and selection activities. The project coordinator's activities focused on disseminating information to school personnel, school administrators, counselors and others and on encouraging participation by eligible schools. Employers were recruited primarily through contacts with those who were already participating in the co-op program.

As of June 1981, the project had registered 522 student apprentices and 321 apprenticeship programs with the BAT. Apprenticeship occupations included machinist, auto mechanic, tool and die maker, carpenter, electrician and plumber, among others.

New Jersey historically had a good relationship between the state BAT office and the vocational education system, which allowed for the use of common forms and joint responsibility for the establishment of new apprenticeship programs. This relationship extended to staff of the New Jersey project. Either BAT or the appropriate personnel in the educational network generated the paperwork needed for approval and registration of an apprenticeship program. In general, the paperwork was developed by the co-op or apprentice coordinators. A system was developed jointly by BAT and the New Jersey project whereby all registration packages were submitted to BAT through the project to ensure that all application packages were complete when they were submitted.

Linkages between schools and industry in New Jersey were excellent. Moreover, the co-op program was well accepted throughout the State. Once an apprenticeship slot was developed, there appeared to be a universal appreciation of the concept by the student apprentice, the employer-supervisor, school personnel and the responsible coordinator. New Jersey's heavy industrialization, with industry's concomitant demand for skilled craftspersons, was indicative of the potential for expansion of the apprenticeship-school linkage concept in the area.

Project Director:
Ms. Patricia Peacock
NJ State Dept. of Education
Div. of Vocational Education
P.O. Box 2019
225 West State Street
Trenton, NJ 08625
(609) 292-6565

BAT Monitor:
Mr. Mark S. Saiff
USDL/BAT--Room 14
96 Bayard Street
New Brunswick, NJ 08901
(201) 247-1421

RHODE ISLAND APPRENTICESHIP-SCHOOL LINKAGE PROJECT
RHODE ISLAND, STATEWIDE

The Rhode Island apprenticeship-school linkage project illustrated the administrative model of a statewide project serving multiple local school systems. The project was sponsored by the Rhode Island Department of Education, Bureau of Vocational-Technical Education, through a subcontract to the Industry-Education-Labor (IEL) Council, a non-profit corporation. The project, which was initially funded in September 1978, was designed to promote, develop and expand apprenticeship-school linkages throughout Rhode Island's five counties. The 67 high schools and 9 vocational centers in the state all were considered eligible for participation.

Rhode Island had a history of industry, labor and education collaboration in the area of apprenticeship. This collaboration was stimulated by the State's Bureau of Vocational-Technical Education and exemplified by the IEL Council. Organized labor was supportive of both apprenticeship and vocational education.

The project staff of seven included the project director, a project coordinator, three project specialists, and two secretaries. Strategies developed to recruit employers and students included assignment of project staff to geographic areas; organization of speaking assignments at service clubs, trade associations and educational associations; development of a flier for employers soliciting permission for visits by co-op coordinators and project staff; and development of a flier for dissemination among high school juniors and seniors. Project staff involved co-op coordinators in the high schools and vocational-technical schools, and alternatively, guidance counselors in student recruitment and referral efforts.

All industries and occupations, with the exception of the building trades, were included in the program concept. Emphasis was placed on health and energy related occupations and, in addition, on development of apprenticeships in non-traditional occupations approved and registered by BAT, such as animal health technician, carbide toolmaker, carpenter-marine joiner, commercial art technician, commercial fisher and legal secretary. Apprentices were also registered in traditional apprenticeship areas, such as auto mechanic, printer, machinist and auto body repairer. In all, 374 apprentices and 84 apprenticeship programs were registered through the Rhode Island project's efforts by June 1981.

The registration of apprentices and apprenticeship programs required approval by both BAT and the Rhode Island SAC. In addition, these agencies provided technical assistance in reviewing work processes and schedules, in forms submission and in development of promotional materials.

The Rhode Island project was successful in establishing linkages between schools and industry. Reactions of school personnel, employers and student apprentices to the apprenticeship-school linkage concept appeared to be positive.

Project Director:
Dr. Frank M. Santoro
Roger Williams Building
Room 222-B
22 Hayes Street
Providence, RI 02908
(401) 277-2691

BAT Monitor:
Mr. James E. MacGlaflin
USDL/BAT
Federal Building
100 Hartford Avenue
Providence, RI 02909
(401) 528-4328

ROCKFORD APPRENTICESHIP-SCHOOL LINKAGE PROJECT
ROCKFORD, ILLINOIS

The Rockford demonstration project illustrated the administrative model of an independent non-profit corporation. It was initiated in October 1978, under the auspices of the Rockford Area Vocational Corporation (RAV Corp.), a non-profit corporation created solely to administer this project. The Rockford project was located in the City of Rockford, and, during its first 2 years of operation, the majority of its students were recruited from the Rockford Area Vocational Center. This center was the only area vocational center in the Illinois counties of Winnebago, Boone, Dekalb, Ogle and McHenry. Thus, the Rockford project served a 5-county area involving 22 other schools. However, almost all students in the area vocational center were from the Rockford school district. Therefore, the initial recruiting mechanism through the area vocational center represented a de facto restriction of recruiting to the Rockford school district. During its last year of operation, the RAV Corp. dropped its special relationship with the area vocational center and made direct contact with high schools in all the major school districts in the Rockford area.

The Rockford apprenticeship-school linkage project staff initially included the project director, a full-time assistant director, two half-time coordinators (who were instructors at the RAVC) and a secretary. Staffing was modified later when the project broadened its base of student recruitment. The Rockford project utilized both a direct and indirect approach to student recruitment. The project coordinators recruited directly by visiting appropriate schools and classes to talk with juniors and seniors and to identify students who might be interested in apprenticeship. Indirect recruitment involved Diversified Occupations coordinators in the area's comprehensive high schools, who sometimes made inquiries about apprenticeship positions for their students. In some cases, employers also identified potential student apprentices.

The strategy for recruiting employers was based on the one-to-one contacts of project staff who had substantial personal relationships with private sector employers. In addition, employers were recruited through use of form letters to businesses that ran "Help Wanted" advertisements in the local newspaper. These letters described the apprenticeship program, explained its usefulness to the employer and extended the offer of a visit by a project staff member to the job site.

All training for this project was conducted on the job and in the work apprenticeship programs at the worksites. The employment areas of student apprentices included machinist, tool and die maker, offset press operator, diesel mechanic, auto mechanic, fastener technician and auto body repairer. As of June 1981, the program had registered 209 apprentices and 117 apprenticeship programs.

Registration by BAT usually took 3 to 4 weeks. The BAT monitor worked closely with the project director and helped to expedite registration activities and to provide technical assistance on registration procedures and on

program operations. Apprentices and employers alike expressed satisfaction with the Rockford Project. Rockford was a highly industrialized area, and there appeared to be a high demand for skilled labor. Apprenticeship was viewed by local employers as a viable means of training a skilled labor force.

Project Director:
Mr. Paul Mann
Rockford Area Vocational
Corporation
1410 Auburn Street
Rockford, IL 61103

BAT Monitor:
Mr. John E. Gavin
USDL/BAT--Room 150
Federal Building
211 South Court Street
Rockford, IL 61101
(815) 987-4253

APPENDIX B

GLOSSARY

GLOSSARY

Apprenticeship and Training Representatives (ATRs)--the Bureau of Apprenticeship and Training's ATR serve as technical advisers on the development and improvement of apprenticeship and other job training on the adoption of job practices that better utilize worker skills.

Apprenticeship registration--refers to both the registration of an apprenticeship program and to the registration of an apprentice. Both components of the registration process include involvement of either the Bureau of Apprenticeship and Training or the State Apprenticeship Council. The first component is the registration of an apprenticeship program in a specific trade with an employer. This process involves the approval of a systematic schedule of training in different trade skills provided for an apprentice over the period of the apprenticeship. The second component of registered apprenticeship is the apprentice registration. Apprentice registration requires an agreement between the employer and the employee to involve the apprentice in the apprenticeship training at specific wages with set periods of wage increments over the period of the apprenticeship.

Apprenticeship-school linkage demonstration--the overall USDOL demonstration related to the combined operations of the apprenticeship-school linkage projects. The term connotes the education aspects of the demonstration and its implementation through the system of registered apprenticeship.

Apprenticeable occupation - Title 29, Code of Federal Regulations, part 29.4, defines an apprenticeable occupation as one that:

- Is customarily learned in a practical way through a structured, systematic program of supervised on-the-job training;
- Is clearly identified and commonly recognized throughout an industry;
- Involves manual, mechanical, or technical skills and knowledge that require a minimum of 2,000 hours of on-the-job work experience; and
- Requires related instruction to supplement the on-the-job training. Such instruction may be given in a classroom, through correspondence courses, self-study, or other means of approved instruction.

Bureau of Apprenticeship and Training (BAT)--the bureau within the Department of Labor which is responsible for those activities which guide, assist and promote apprenticeship. The BAT has offices located in every state and works with employers, unions and State apprenticeship agencies.

Cooperative education--the term "cooperative education" means a program of vocational education for persons who, through written cooperative arrangements between the school and employers, receive instruction, including required academic courses and related vocational instruction by alternation of study in school with a job in any occupational field, but these two

experiences must be planned and supervised by the school and employers so that each contributes to the student's education and to his or her employability. Work periods and school attendance may be on alternate half days, full days, weeks or other periods of time in fulfilling the cooperative program. Cooperative education programs are usually administered within the vocational programs offered at particular schools and involve a cooperative education coordinator who supervises the education-work experiences of the students. The program is directed toward specific on-the-job training related to the student's vocational program for study in high school. Students are paid at minimum wages or receive a lump sum stipend while training.

School-to-work transition--the adjustment processes accompanying the transition from school to full-time employment. The adjustments inherent in this transition may be problematic for some individuals while others may be able to adjust without difficulty. The basic concept implies a status change (i.e., from student to worker); an environmental change (i.e., from the school setting to the work setting); and developmental changes (the onset of adulthood and the financial and emotional independence characteristic of this stage).

State Apprenticeship Council (SAC)--councils recognized by the U.S. Department of Labor have been established in 29 States, the District of Columbia, the Virgin Islands and Puerto Rico. Each receives policy guidance from an apprenticeship council composed of employer, labor and public representatives and has procedures for recognizing apprenticeship programs in the States. A number have staffs to help employers and unions develop, expand and improve apprenticeship programs. Their work is carried out in cooperation with the Bureau of Apprenticeship and Training as an integral part of the national apprenticeship system.

Student apprentice - refers to those students who were registered as apprentices while they were still enrolled in high school, i.e., the students who participated in the program. The term is used to refer to the student program participants whether or not they were registered fully or registered provisionally as apprentices through the BAT or SACs.